

**Testimony**  
**Dr. Gregory A. Petsko**  
**President, American Society for Biochemistry and Molecular Biology**  
**Presented before the**  
**House Appropriations Subcommittee on Commerce, Justice, and Science**  
**February 11, 2010**

Good Afternoon. I am Greg Petsko, President of the American Society for Biochemistry and Molecular Biology, which has about 12,000 members, from every state in the Union.

I am honored to be here to express our strong support for the President's request for the National Science Foundation for FY 2011. Since in the overall budget so many agencies and programs have received smaller increases than NSF's—or none at all—we are encouraged that the Administration continues to demonstrate that it understands how important science is as an underpinning for this country's continued economic growth and prosperity. Nevertheless, we hope the Congress will view the President's request as a floor, not as a ceiling, when considering funding levels for the agency in the coming months.

ASBMB considers NSF to be one of the most underfunded agencies in the Federal government. NSF funds the majority of academic research in a wide variety of disciplines. NSF-sponsored research gave us the laser, and the whole field of nanotechnology. NSF also receives far more proposals than it can fund. For example, in reviewing NSF data, we see that in Fiscal Year 2009 NSF was able to fund about 34,800 research grants, a 28 percent success rate. Thus, barely 1 in 4 research grants were funded. And of course this includes stimulus funding as well.

NSF projects that in 2011, the agency will fund 39,600 research grants. Although this is almost 5,000 more grants than the agency funded in 2009, the success rate drops to 20 percent, or 1 in 5 applicants. Thus, there is a huge group of researchers out there who could be funded if money was available. Sadly, unless Congress acts, this tremendous pool of talent will continue to languish.

We are of course very appreciative that the President has proposed an almost 8 percent increase, almost \$500 million, bringing the NSF budget to \$7.424 billion. However, in a perfect world, we would like to see the budget increased to \$7.68

billion, to conform to the recommendation of the Federation of American Societies for Experimental Biology (FASEB). This would allow funding for several programs we believe need additional support which I will describe momentarily.

ASBMB usually views the NSF budget as a whole, since our members receive funding from a number of different programs, not just the Biological Sciences (BIO) Directorate. Nevertheless, we are pleased that the BIO Directorate goes up almost as much as the agency overall, because certain programs within BIO are even more underfunded than the agency as a whole.

The Chemistry Division of the Mathematics & Physical Sciences Directorate fares somewhat less well, with the President proposing less than a 6 % increase there. We hope Congress can make sure that this Division gets a bit more money when the agency budget is finalized.

However, the two areas where we consider it vital that adjustments be made are in Education and Human Resources, and Major Research Instrumentation.

The President is proposing only a 2.2% increase for Education and Human Resources in 2011. I don't need to go into the many reasons why science education is so important; these have been amply detailed in reports going back at least to the 1980s and "A Nation at Risk"; they have been most lately described in "Rising Above the Gathering Storm." It is sad that the problems so eloquently described in "A Nation at Risk" are still with us in large measure today. It is our hope that we as a nation can actually begin to provide a level of funding for science education that does justice to the eloquent titles of these reports. Speaking personally, I love doing research, but training the next generation of scientists is the most important thing I do.

A second area where we have concern is the flat funding for the Major Research Instrumentation program. Funding for advanced instrumentation in most universities is in serious trouble, as agencies struggle to maintain funding for research programs and cut back in other areas that are, unfortunately, exceptionally vital to a robust research enterprise. We hope Congress can address this problem as well.

Finally, we encourage NSF, as it studies how to spend its increase, to avoid the siren song of new initiatives that have grandiose names but that in the end merely serve to take money away from NSF's strength—the core research funding found in its various programs, divisions and directorates. These core research programs may not be glamorous and new sounding, but they are where the vital work of this

agency – fostering innovation and creating new knowledge and new industries - is best exemplified and carried out.

Thus, to summarize, Mr. Chairman, our overall impression of the President's proposed NSF budget is good. The increases are needed and welcome, and we certainly applaud the President for finding the money for an increase in these extraordinarily difficult budgetary times. That having been said, we hope the Congress can do a little better, in the areas I mentioned, to build upon the momentum created by the stimulus package of 2009 and 2010. We risk frittering away those gains otherwise.

I am happy to take any questions you might have. Thank **you**.